DOSS SECURITY

# SECURITY AND CCTV PRODUCT RANGE 2015

## Smart Security Solutions

- Integrated CCTV Cameras
- Dome Cameras
- Build Your Own Camera
- HD-SDI
- Power & Power Accessories
- Cables & Accessories
- DVR Range + IP CCTV
- Non-Permanent Security

**WWW.DOSS.COM.AU** OR CALL **1800 337 366** FOR MORE INFORMATION

# Welcome

## Be in the know!

Watch informative videos and get the low down on Doss Security products.

# DOSS SECURITY AND CCTV CONTENTS


## Integrated CCTV Cameras [Pg. 5]

Full range of Bullet cameras that provide longer range compared to Dome cameras.

## Dome Cameras [Pg. 7]

Compared to Bullet cameras, Dome cameras provide added benefits such as easy ceiling mount and vandal proof options in a low profile design.

## Build Your Own Camera [Pg. 8]

Choose the body, choose the lens, housing and bracket and you are good to go. We show you all the parts you need.

## HD-SDI [Pg. 10]

High Definition Serial Digital Interface is ideal for upgrading existing analogue CCTV systems to Digital Full HD CCTV.

2015 EDITION


## Power & Power Accessories [Pg. 12]

Power is important. Have a look at voltage converters, power supplies, splitters, DC plugs, sockets and more.

## Cables & Accessories [Pg. 16]

Any type and length of cable for any job. Find a massive range of video baluns as well as BNC accessories here.

## DVR and IP CCTV Range [Pg. 18]

See our traditional coaxial Digital Video Recorders or our new IP based NVR and HD IP cameras that easily plug in via your existing network.

## Non-Permanent Security [Pg. 20]

Video intercoms, vehicle cameras, pinhole cameras, door sensors and more, including a complete wireless security solution for renters!

# CCTV Camera Factory Quality Control

Here at Doss, we strive to provide our customers the best quality products at reasonable prices. As such, our factories adopt manufacturing techniques and strategies that ensure our products meet the highest standards. An inspection to our camera factory showed us just what lengths they go to, to ensure a reliable product.

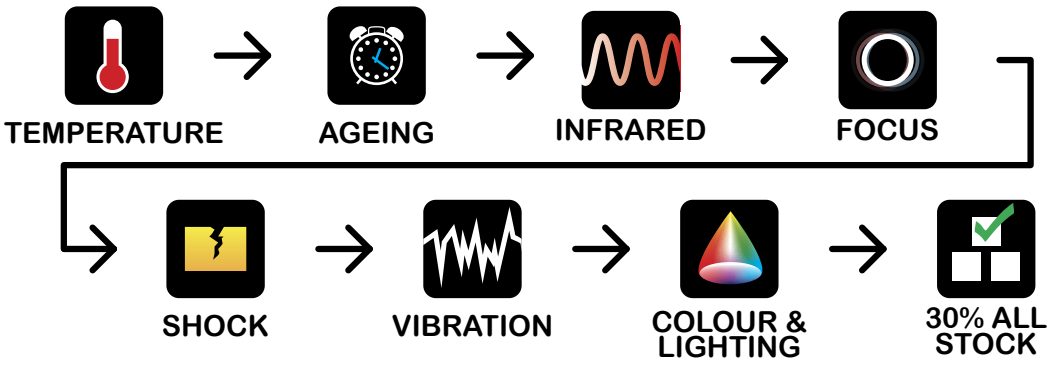
Unlike some factories, all PCBs are produced and assembled in-house and tested thoroughly before assembly. Any defective circuit boards are able to be diagnosed at chip level and, if possible are repaired.

Once assembled, every camera is tested to ensure they operate over their specified minimum and maximum temperature range in a large oven-like machine, and aged for a full 7 days straight before the rest of the testing.

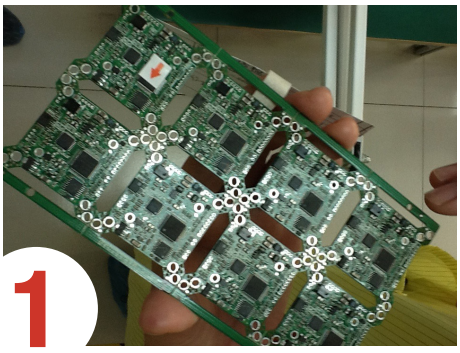
First their infrared capabilities are tested to ensure a quality image in 0 Lux (ie using only the cameras' built-in IR LED lighting). Next the focus is checked using charts. The cameras are then subjected to impact shock and vibrations and rechecked to make sure camera construction is solid. The cameras are then put through their paces in a number of lighting conditions and scenarios, and only those that meet the high standard make it through.

As if that wasn't enough, after all testing is completed, 30% of all cameras in storage awaiting shipping are picked at random, and retested using this method. So you can be confident when you buy a Doss CCTV camera, you are receiving a quality camera!

1. Faulty component identified on PCB to be repaired or replaced.
2. Device used to test products' temperature ranges – like a combination fridge-oven!
3. PTZ controls and Dome cameras half way through their 7-day ageing stage.
4. Factory worker testing camera in completely dark environment. His hand is behind a curtain holding the camera.
5. Staff select at random 30% of all completed stock and unpacks them for repeat testing.




## Factory tour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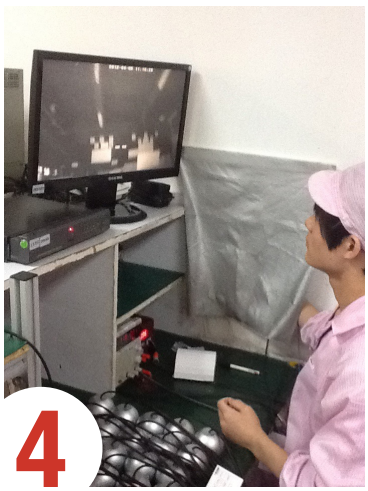
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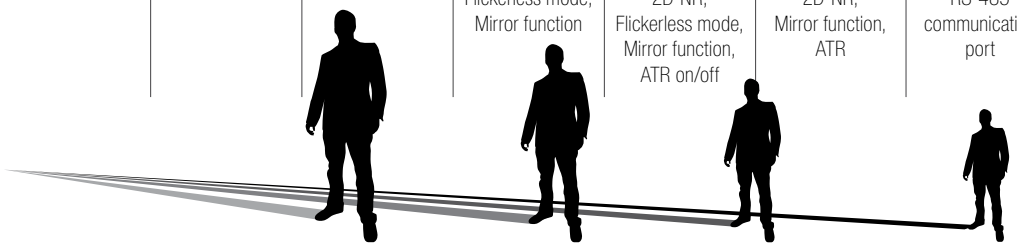
5

# Integrated CCTV Cameras

| | IN15ECO<br>43150004 | IN15<br>43150008 | IN30<br>43150012 | IN30PRO<br>43150013 | IN50<br>43150016 | IN50PRO<br>43150017 | IN100<br>43150030 | IN120<br>43150032 |
|---|---|---|---|---|---|---|---|---|
| **Sensor** | 1/3" Sony Super HAD II CCD | 1/3" Sony EXview HAD II CCD | 1/3" Sony EXview HAD II CCD | 1/3" Sony Super HAD II CCD | 1/3" Sony EXview HAD II CCD | 1/3" Sony Super HAD II CCD | 1/3" SONY EXview HAD II CCD | 1/4" Sony Super HAD CCD |
| **DSP** | NEXTCHIP 2030 | Effio E | Effio E | Effio V | Effio E | Effio V | Effio E | Samsung DSP |
| **Resolution** | 600 TVL | 700 TVL | 700 TVL | 700 TVL | 700 TVL | 700 TVL | 700 TVL | 560 TVL (680 B&W) |
| **Sensor Size** | 2.7mm x 3.6mm | 4.9mm x 3.7mm | 4.9mm x 3.7mm | 4.9mm x 3.7mm | 4.9mm x 3.7mm | 4.9mm x 3.7mm | 4.9mm x 3.7mm | 2.7mm x 3.6mm |
| **IR LEDs** | 24 x Ø5mm | 24 x Ø5mm | 36 x Ø5mm | 36 x Ø5mm | 48 x Ø5mm | 48 x Ø5mm | 48 x Ø5mm + 2 Hi-Lux IR spots | 48 x Ø5mm |
| **IR Distance** | 10 - 15m | 10 - 15m | 20 - 30m | 20 - 30m | 40 - 50m | 40 - 50m | 80 - 100m | 80 - 120m |
| **Lens** | 3.6mm M12 | 3.6mm M12 | 6mm M12 | 4 - 9mm Manual | 4 - 9mm Manual | 4 - 9mm Manual | 3.6 - 16mm | 3.3 - 99mm |
| **IP Rating** | IP66 | IP66 | IP66 | IP66 | IP66 | IP66 | IP66 | IP66 |
| **Signal to Noise Ratio** | > 48 dB | > 48 dB | > 48 dB | > 48 dB | > 48 dB | > 50 dB | 50 dB AGC Off | > 52 dB |
| **Effective Pixels** | NTSC: 510 x 492<br>PAL: 500 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 976 x 494<br>PAL: 976 x 582 | NTSC: 752 x 582<br>PAL: 768 x 582 |
| **Power (Max)** | 12 V DC<br>400 mA (IR) | 12 V DC<br>400 mA (IR) | 12 V DC<br>450 mA (IR) | 12 V DC<br>450 mA (IR) | 12 V DC<br>600 mA (IR) | 12 V DC<br>600 mA (IR) | 12 V DC<br>1000 mA (IR) | 12 V DC<br>1000 mA (IR) |
| **White Balance** | Auto | Auto | Auto | Auto | Auto (ATW, AWB, Fixed, Manual) | Auto (ATW, Manual, User1, User2, Push Lock, CRR) | Manual, User1, User2, Push Lock, CRR, ATW | Auto (ATW, AWC, Manual) |
| **Auto Gain Control** | Auto | Auto | Auto | Auto | On / Off (0 ~ 255) | On / Off | Auto / Manual | On / Off (0 ~ 128) |
| **OSD** | - | - | - | - | ✓ | ✓ | ✓ | ✓ |
| **Electronic Shutter** | Auto<br>1/50 ~ 1/100K sec. | Auto<br>1/50 ~ 1/100K sec. | Auto<br>1/50 ~ 1/100K sec. | Auto<br>1/50 ~ 1/100K sec. | FLK / Manual / Fixed<br>1/50 ~ 1/100K sec. | Auto / Manual<br>1/50 ~ 1/100K sec. | Auto / Manual<br>1/60 ~ 1/100K sec. | Auto / Manual<br>1/50 ~ 1/120K sec. |
| **Privacy Function** | - | - | - | - | 4 zones | 4 zones | 4 zones | 32 zones |
| **Motion Detection** | - | - | - | - | 64 zones | 4 zones | 4 zones | 4 zones |
| **BLC (Back Light Compensation)** | - | - | - | - | On / Off<br>(64 zones) | HLC / BLC / OFF | HLC / BLC / OFF | SSDR / BLC / OFF |
| **Other features** | - | - | - | - | Flickerless mode, Mirror function | 2D-NR, Flickerless mode, Mirror function, ATR on/off | 2D-NR, Mirror function, ATR | RS-485 communication port |

## IR Distance



**IN15** 10 - 15 metres

**IN30** 20 - 30 metres
**IN30PRO**

**IN50** 40 - 50 metres
**IN50PRO**

**IN120** 100 - 120 metres

# Cooking With Doss Security

## Think that Doss CCTV products are only for security purposes?

Think again! One of our customers thought outside the CCTV box to put together a dynamic classroom that allows better interaction with students, providing a new perspective on cooking demonstrations.

Traditionally cooking class demonstrations were performed using an over-bench mirror, by which students were able to see what was happening on the bench top from above.

Today with emerging remote learning, the classroom has to keep up to provide students who cannot always travel to see live demonstrations with the same feature rich experience as being there physically.

## Ingredients:

4x IN30PRO 700TVL Security Cameras
1x RPDVR4CH with 1TB HDD
4x CEL15M Camera Extension Leads
1x PW8204 2.1mm to 4X 2.1mm Plugs Adapter
1x SM1250 Switchmode Power Supply 12VDC/5Amp
1x Epson EB925 Projector
1x 100" Projector Screen

## Method:

**1.** Three of the high resolution (700TVL) IN30PRO cameras were installed above the workbench, focused on three commonly used workspaces allowing the traditional overhead view. This resulted in a much clearer view of techniques and preparation of ingredients than a mirror alone could afford.

**2.** The fourth camera was situated slightly behind lecturer, so that technique could be easily demonstrated from the point-of-view of the lecturer. Something that would not be possible with mirrors.

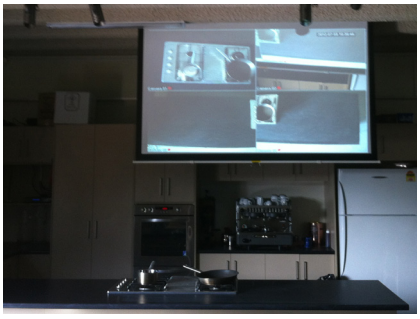
**3.** The RPDVR4CH DVR receives all four video signals and is able to output them all simultaneously via the projector onto the screen.

While this could have been achieved with a simple 4-input video multiplexer, the use of the DVR allows the lecturer to manually configure the camera views on the screen via a laptop, or even an iPhone or Tablet. This means when greater clarity is required, the corresponding camera source can be made fullscreen at a touch. Alternatively, video switching can be made automatic using built-in motion detection to change the video output so no hands are required at all!

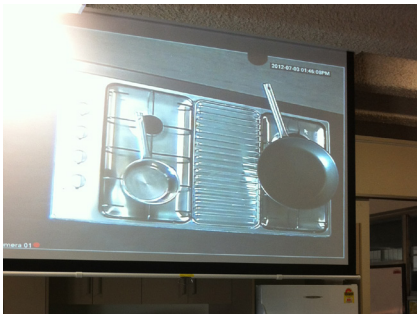
The DVR also allows remote viewing via the internet, allowing students to watch live video from their own home or any other location with internet access.

Audio can also be recorded via the DVR's audio input. A simple lapel mic or area mic can be connected so audio can be recorded along with video eliminating the need for post-processing audio synchronisation.

Before installation: Basic mirror not only limited in view–also warped, affected by steam & viewing angle.



Four camera views available at once so students can see everything as it happens.



Full screen view of stove-top. Students can clearly view cooking process.

# Camera Accessories

### DOME30 WALL BRACKET

**J38** | 43150930

- Allows you to mount the DOME30 to a wall

### DOME30 CEILING BRACKET

**J41** | 43150931

- Modify the viewing height of your DOME30

### IN50 BRACKET EXTENSION

**IN50CEB** | 43150929

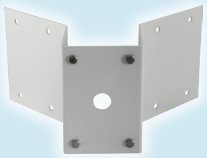
- Length: 6cm
- Multiple extensions can be fit together for more length

### CAMERA MOUNTING BOX

**CMB07** | 43150933

- Access holes for conduit
- Suitable for IN15-IN100

### MINI SPEED DOME CORNER BRACKET



**J29** | 43150928

- Mount the MINIPTZ from the corners of internal and external walls!

### INLINE PICK UP MICROPHONE

**AA001** | 43158020

- High sensitive microphone (-65dB)
- Inline design
- 2.1mm Socket/BNC Socket/RCA Socket to 2.1mm Plug/BNC Plug
- DC12V power operation

### AUDIO PICK UP MICROPHONE

**AA002** | 43158025

- High sensitive microphone (-65dB)
- 45cm Power & audio cable
- DC12V power operation

### RS232 TO RS485 CONVERTER

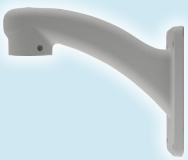
**RS001** | 30578005

- Does not need power supply
- Supports hot switching
- Enables control of PTZ cameras from RS232 devices (eg: PC)

# Dome Cameras

| | MINIDOME | WIDEDOME | STEALTHDOME | DOME15ECO | DOME15PRO | DOME30 | DOME30PRO |
|---|---|---|---|---|---|---|---|
| | ● 43150086<br>○ 43150087 | ○ 43150082 | ○ 43150084 | ○ 43150080 | ○ 43150070 | ● 43150088<br>○ 43150089 | ● 43150090<br>○ 43150091 |
| Sensor | 1/3" Sony Super HAD CCD II | | | | | | |
| DSP | EffioE | NEXTCHIP 2040 | EffioS | NEXTCHIP 2030 | EffioV | EffioE | EffioV |
| Resolution | 700 TVL | 700 TVL | 700 TVL | 600 TVL | 700 TVL | 700 TVL | 700 TVL |
| OSD | - | - | ✓ | ✓ | ✓ | ✓ | ✓ |
| Lens | 3.6mm | 2.8mm | 4-9mm | 3.6mm | - | 4-9mm | 4-9mm |
| Lens origin | China | China | Korea | China | - | Korea | Korea |
| IR Distance | 10-15m | 5-10m | - | - | - | 20-30m | 20-30m |
| LEDs | 24 x Ø5mm | 6 x Ø5mm | - | - | - | 36 x Ø5mm | 36 x Ø5mm |
| Horizontal view | 90° | 150° | 98-38° | 90° | - | 98-38° | 98-38° |
| Privacy zones | 4 | 8 | 4 | 8 | - | 4 | 8 |
| Motion detection | Yes (4 zones) | | | | | | |
| Backlight compensation | Yes (64 zones) | | | | | | |
| Other features | - | - | Vandal-proof, 3-axis bracket adjustable, IP65, Flickerless mode, Mirror mode | Vandal-proof, 3-axis bracket adjustable, IP65 | - | Vandal-proof, IP65 | Lightning proof, IP65, bracket adjustable |

## MINI SPEED DOME WALL MOUNT



**J21** | 43150926

- Neatly and stylishly mount the MINIPTZ to any wall

## MINI SPEED DOME CEILING MOUNT

**J22** | 43150927

- Mount the MINIPTZ from the ceiling; ideal for shops with high ceilings

## DOME30 MOUNTING BRACKET

**P06G** | 43156105

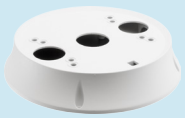
- Also in **White**
- Neatly mount the DOME30 to any solid wall or ceiling

## FHDDOME FLUSH MOUNT BRACKET

**J57** | 43156110

- Mount the FHDDOME and DOME15PRO cameras flush to any ceiling

## FHDDOME MOUNTING BOX



**P10** | 43156115

- Mount the FHDDOME and DOME15PRO cameras to any solid wall or ceiling

## PTZ KEYBOARD CONTROLLER

**KT301** | 43150160

- RS485 control bus: multiple protocols supported
- Up to 256 Cameras/devices ▪ Left/Right, Up/Down, Zoom

## FHDDOME WALL MOUNT BRACKET

**J11** | 43156100

- Perfect for fixing DOSS Dome Cameras to a wall or poles
- IP66 waterproof ▪ Also suitable for DOME15PRO

## MINI SPEED DOME CAMERA PTZ

**MINIPTZ** | 43150130

- High Resolution: 540TVL with colour mode
- IP66 waterproof ▪ 1/4" Super HAD Sensor
- 10x optical zoom lens ▪ Comes with J21 wall bracket

# Build Your Own Camera

## 1

### WIDE DYNAMIC RANGE CCD

**WDRBODY** | 43150028

- 1/3" SONY Super HAD CCD
- 550TVL Resolution
- Motion detection & privacy zone
- OSD Menu
- Dimensions: 130 x 65 x 60mm (LWH)

## 2

### 3.5MM-8MM VARI-FOCAL

**SSVO358G** | 43150855

- C or CS mount
- Auto-Iris Lens
- Length: 48mm
- Wide range zoom
- Aperture: f/1.4

### 6MM-15MM VARI-FOCAL

**SSVO615G** | 43150860

- C or CS mount
- Auto-Iris Lens
- Length: 61mm
- Mid-range zoom
- Aperture: f/1.4

### 6MM-60MM VARI-FOCAL

**SSVO660G** | 43150854

- C or CS mount
- Auto-Iris Lens
- Aperture: f/1.6
- Designed in Japan
- Telephoto range zoom
- Length: 70mm

## 3

### ALUMINIUM CAMERA HOUSING

**AH24** | 43150942

- Slide off top
- Built-in blower (On: >40°C Off: <30°C)
- Max camera: 215x105x80mm (LxWxH)
- 3mm glass window

### ALUMINIUM CAMERA HOUSING

**OH335** | 43150940

- Slide off top
- 3mm thick glass window
- Max camera: 270x85x70mm (LxWxH)
- Cable glands seal out moisture

### ALUMINIUM CAMERA HOUSING

**AH20** | 43150938

- Slide off top
- 3mm thick glass window
- Max camera: 140x85x70mm (LxWxH)
- Cable glands seal out moisture

## 4

### CAMERA BRACKET MAX 3KG

**CBP001** | 43156005

- Ball and socket joint – mount camera in any position!

### CAMERA HOUSING BRACKET

**DCMB10** | 43157991

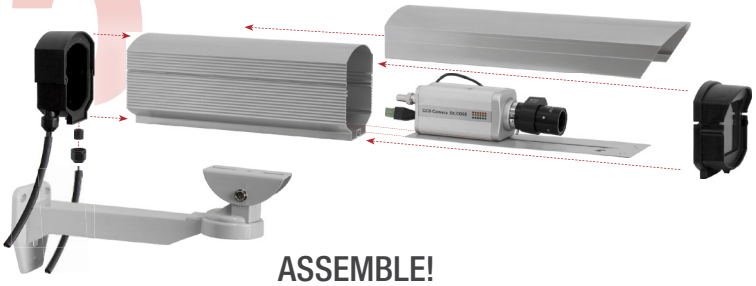
- Constructed of cast metal
- Suitable for large camera housings

### ALUMINIUM CAMERA BRACKET

**CBA005** | 43156060

- Made from durable aluminium
- Suitable for large camera housings

## 5



### ASSEMBLE!

Tips for building your own camera:

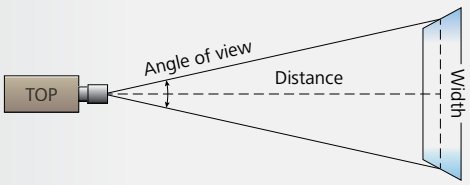
- Make sure your camera + lens fits the housing: This also includes any plugs, adapters and leads that may be required, so take them into account when measuring up
- Consider the detail that you require to be recorded and choose a lens that will give you the zoom/view you require to obtain that detail.
- Camera housings generally **do not** come with mounting brackets to allow customers to decide on a mounting solution suitable for their own situation

## How To Choose A Lens

Lens zoom or area of view is dependent on several factors – these include the camera's sensor size (eg 1/4" or 1/3"), and the focal length of the lens. This means when choosing a lens, you must first choose a camera.

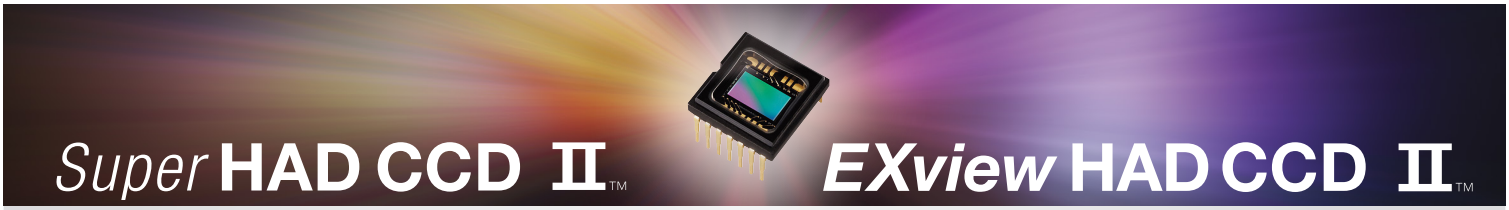
The following table can be used as an estimate for working out:–

- The angle of view,
- the horizontal width of view and,
- the distance of view.




| FOCAL LENGTH | 1/4" SENSOR | | | 1/3" SENSOR | | |
|---|---|---|---|---|---|---|
| | Deg | Width* | Dist† | Deg | Width* | Dist† |
| 2.0mm | 84.0° | 18.0m | 2.8m | 100.4° | 24.0m | 2.1m |
| 2.8mm | 65.5° | 12.9m | 3.9m | 81.2° | 17.1m | 2.9m |
| 3.5mm | 54.4° | 10.3m | 4.9m | 68.9° | 13.7m | 3.6m |
| 6.0mm | 33.4° | 6.0m | 8.3m | 43.6° | 8.0m | 6.3m |
| 8.0mm | 25.4° | 4.5m | 11.1m | 33.4° | 6.0m | 8.3m |
| 15.0mm | 13.7° | 2.4m | 20.8m | 18.2° | 3.2m | 15.6m |
| 20.0mm | 10.3° | 1.8m | 27.8m | 13.7° | 2.4m | 20.8m |
| 25.0mm | 8.2° | 1.4m | 34.7m | 11.0° | 1.9m | 26.0m |
| 40.0mm | 5.2° | 0.9m | 55.6m | 6.9° | 1.2m | 41.7m |
| 50.0mm | 4.1° | 0.7m | 69.4m | 5.5° | 1.0m | 52.1m |
| 60.0mm | 3.4° | 0.6m | 83.3m | 4.6° | 0.8m | 62.5m |

*Width of view is based on a camera distance of 10m from target area
†Distance based on a camera width of view of 5m




# Sony CCD Camera Sensors

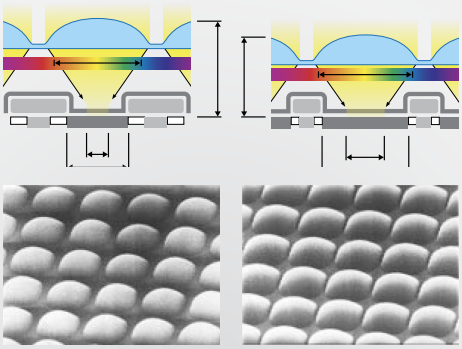
Security cameras are used 24 hours a day, 365 days a year in a wide range of environments. The performance and reliability of these cameras has come to be seen as extremely important, especially the light resistance characteristics, which allow their use in environments in which the cameras are subject to long periods of intensely bright ambient light.

Constantly striving for high sensitivity and even lower noise is important in the security camera field, so Sony has employed new technologies in the forming and design of their CCDs to improve the structure of their new Super HAD CCD II range.

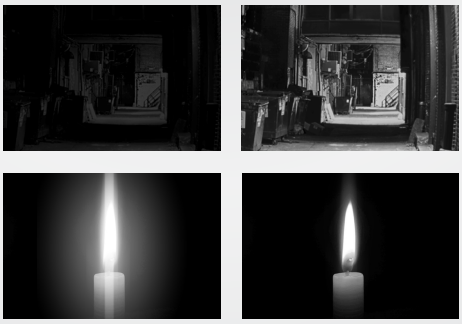
The Sony Super HAD CCD II has implemented improved colour filters that remain strongly resistant to fading and, with new colour pigments, achieves increased colour sensitivities, especially in the blue range.

Not only has the photosensor area been increased, making highly efficient opto-electronic conversion possible, but the percentage of light focused on the individual photo-diodes (light sensors) has been increased significantly by making the sensor apertures larger, and by improving the form and height of the micro-lenses. This allows significant increases in sensitivity and improves colour balance, while also gaining improvements in colour noise and colour saturation signals.

All these improvements means Sony's Super HAD CCD II technology delivers superb images in a much wider range of lighting environments that CCDs were previously capable of.



Other conventional CCD Micro-lens array (left) vs. Sony's HAD II CCD Micro-lens array (right): Height and form has been optimised for ability to gather light, resulting in greater sensitivity and performance.

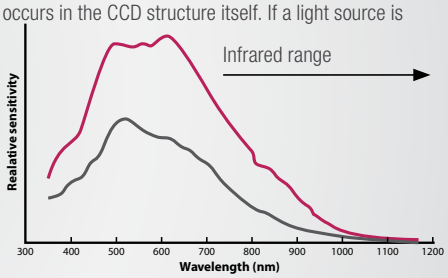


Other conventional CCD (left) vs. Sony's EXview HAD II CCD (right): Sensitivity in the IR range has been increased and smearing has been reduced resulting in better low light image capture.

Sony reanalysed the conventional CCD sensor structure and, building on technologies from their Super HAD CCD II range, developed the EXview HAD CCD II.

Sony's EXview HAD CCD II incorporates sensitivity enhancements developed to improve light sensitivity of its CCD by a factor of two for visible light and a factor of four for near-infrared wavelengths.

Smearing is a problem for night imaging, and actually occurs in the CCD structure itself. If a light source is




Other conventional CCDs (grey) vs. Sony's EXview HAD II CCDs (red): Relative sensitivity over visible to IR wavelengths

bright enough, it can leak through the photo-sensor and penetrate the electrical layer of the CCD, introducing unwanted light signals. As such, CCD design and materials play a heavy role in reducing image smear – something Sony considered when developing the EXview HAD CCD II and produced a CCD with a 20dB reduction in smear.

These technologies produced a sensor that is capable of completely covert surveillance, with superbly clear, low noise, and high brightness images. This allows cameras with EXview to literally see in the dark and still acquire incredible detail.

# CCTV Monitors and Testers

## 3.5" PALM/WRIST CCTV LCD MONITOR/TESTER

**M035LCD** | 43150521

- AV In & Out
- 3.5" TFT LCD monitor
- Wall-mountable (mount not included)
- DC 12V Output; test camera without separate power
- Use it on your desk or attach it to your waist with its versatile kick-stand
- Rechargeable batteries included

## 2.8" PTZ CCTV SECURITY TESTER

**M281PTZ** | 43150570

With UTP cable tester, colour-bar signal generator, CCTV camera video input and more, the M281PTZ is a versatile device for CCTV installers.

- Built-in PAL/NTSC Colour Bar Signal Generator—transmits/receives colour signals
- PTZ (RS485) Protocol analysis and identification including address scanning

## 7" MULTIFUNCTION HD SDI/CCTV TESTER

**M700SDI** | 43150580

Offers a wide range of features to simplify CCTV camera installations. Power, focus and aim your cameras locally without a trip back to the control room. The unit´s bright screen and easy to use menu are ideal for outdoor use.

- SDI HD video in & out with HDMI/ VGA/ BNC in
- Displays analog camera image and PTZ Control
- Detect video peak level, SYNC level, colour burst, IP address search, ping, port flicker network testing and much more!

## What is HD-SDI?

### High Definition Serial Digital Interface

HD-SDI is a digital video interface that transports **Full HD (1080p)** video using basic **RG59 cabling** and uses connectors similar to BNC connectors.

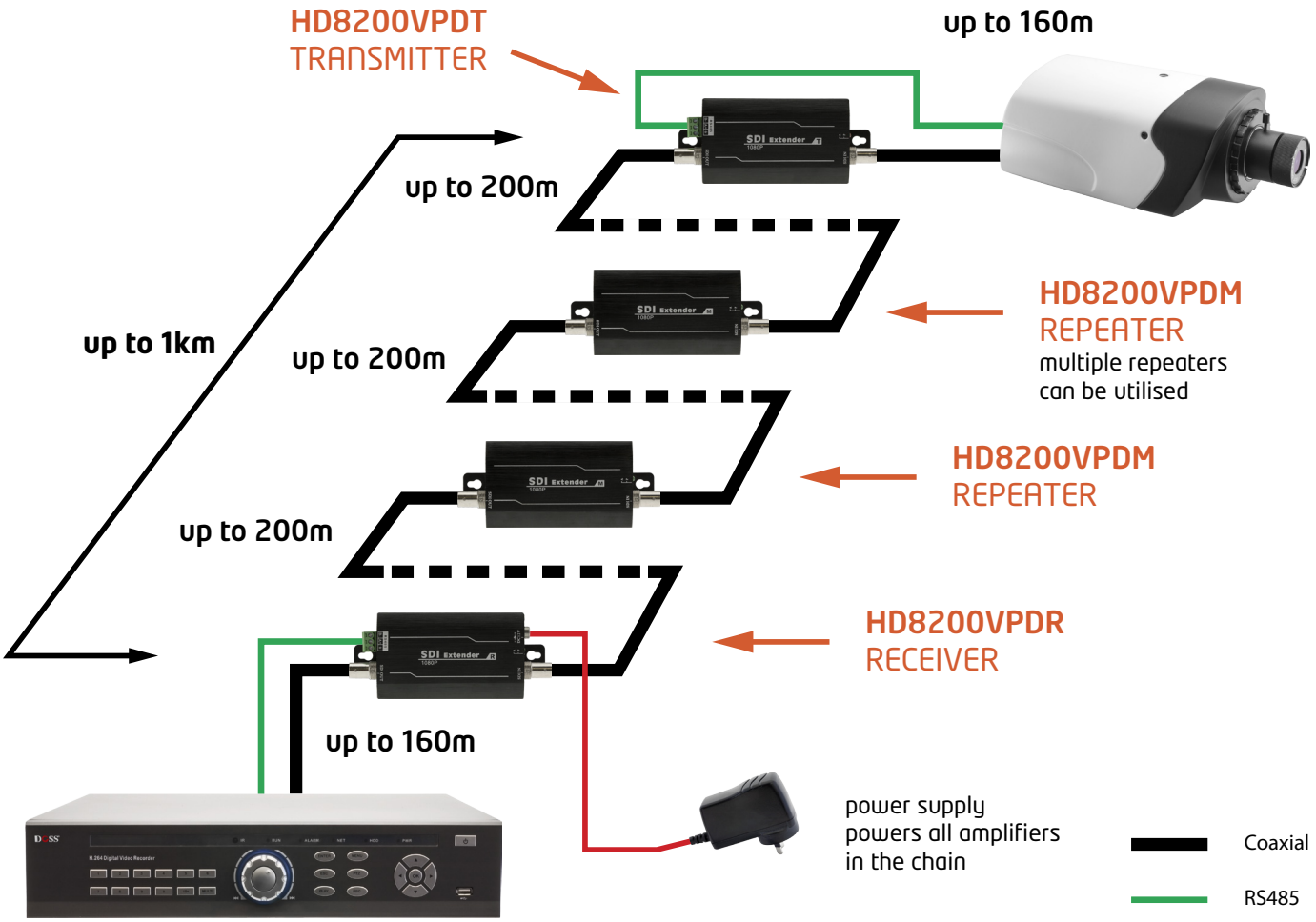
This makes it ideal for upgrading existing analogue CCTV systems to Digital Full HD CCTV as only the hardware and connectors require replacement, and not the cabling!

## HD8200VPDx Series

The DOSS HD8200VPD Series is an active high definition digital signal extender solution for HD-SDI links, operating over 75Ω coaxial cable. Each unit can transmit a HD-SDI high definition digital signal up to 200m over coaxial cable. It can be used with multiple repeaters to extend distance up to 1km.

### Features:

- Compatible with HD-SDI and SD-SDI signals
- Transmission Distance: 200m (HD-SDI 1.485Gbps); 400m (SD-SDI)
- Characteristics: Automatically clock recovery caching processing technology
- In conjunction with multiple repeaters, the distance can reach up to 1km max.
- Automatically conforms to SMPTE and ITU digital video standards
- Embedded ESD to protect the circuit
- High interference suppression, anti-surge technology
- Supports high-definition HD-SDI digital video at 720p/60, 1080i/60 and 1080p/30 formats at all frame rates
- Integrated cable equalizer for long distance video transmission without quality loss
- High-quality digital video and audio transmission with nearly zero latency
- +12~24V DC Supply range



HD8200VPDT | 43151150

HD8200VPDR | 43151155

HD8200VPDM | 43151160

TRANSMITTER | RECEIVER | REPEATER

# HD800xD Series

For splitting high definition digital signals, the DOSS HD800xD series is ideal. Being active splitters, they are also capable of extending HD-SDI signals up to 200m on each output.

## Features:

- Supports SD-SDI (270Mbps) & HD-SDI (1.485Gbps)
- Full HD video format
- Built-in cable equalizer, re-clocker & cable driver
- Distance (Max): SD-SDI 400m, HD-SDI 200m
- Excellent SDI signal jitter suppression function
- Power supply and SDI signal format indicator
- Embedded ESD to protect the circuit
- +12~24V DC Supply range

### 1-IN 2-OUT SDI AMPLIFIER

**HD8002D** | 43151165

- Split HD-SDI signals to two outputs without loss of data/resolution

### 1-IN-4-OUT SDI AMPLIFIER

**HD8004D** | 43151170

- Split HD-SDI signals to four outputs without loss of data/resolution

## Usage example:

# HDMI/SDI Conversion

Whether it's simply hooking up your SDI CCTV system to your home TV or distributing HDMI around your home on economical coax cables, DOSS' HDMI↔SDI converters fit the bill.

### SDI TO HDMI CONVERTER

**SDI2HDMI** | 64550065

- Equalized Loop SDI/HD-SDI output
- HDCP Compliant

### HDMI TO SDI CONVERTER

**HDMI2SDI** | 64550075

- Full HDMI support including embedded audio
- Distributes 1x HDMI source to 2x SDI output simultaneously

# HD-SDI DVR & Cameras

### 4CH HD-SDI DVR 2RU

UP TO 24TB INTERNAL STORAGE + 1080P H.264 RECORDING

**RPDVR4SDI2U** | 43170902

- 4CH HD-SDI 1080P video input
- High resolution, dual-stream recording:
  - Stream 1: 1080p / 720p / D1
  - Stream 2: D1 / CIF / QCIF
- Embedded Linux operating system
- 8x Internal SATA HDD Ports; 1x eSATA Port
- Maximum 3TB per HDD
- Maximum total internal storage: 24TB
- Supports network video preview, storage and playback
- HDMI and VGA video output -- resolutions up to 1920*1080
- Supports Dynamic DNS, Email Notification, Alarm Inputs and Outputs, Two-way Talkback
- Supports Web browser interface, Mobile and Desktop clients, CMS monitoring

### FULL HD-SDI CMOS CAMERA

1080P OVER COAX

**FHDDOME** | 43150105

**FHDBODY** | 43150050

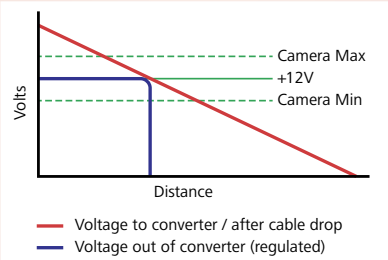
Capable of capturing 2.1 Megapixels and viewing at 1080p real-time.

- Includes 6mm F1.4 CS lens (FHDBODY)
- SDI 1080P full real time transmission
- Transmit over 300m at 1.485Gb/s
- High resolution 64X digital zoom (D-ZOOM)
- DWDR, HLC, Electronic shutter adjustable, 3DNR, anti-flicker, Defog
- OSD menu, Lightning-proof, Back focus adjustable

## Why would I need a Voltage converter?

There are two common applications – Stepping down higher voltage DC power and secondly, converting from 24V AC power down to 12V DC.

For Doss CCTV, we test cabling and cameras at 100m distance. The biggest limitation to the distance is the voltage drop in the cabling – if you feed 12V into the system, 100m later, you might be left with, say, 11V. If it is a 200m or 300m run, at some point the voltage will be too low to operate the cameras.




One solution is to input say 24V DC. In this case you can afford to lose a whole 12V – a voltage converter ensures the supply to the camera is regulated at a safe 12V DC level.

24V AC is also commonly used in security installations. Since all Doss cameras operate on 12V DC, you'll need a voltage converter behind the camera to fit your camera into an existing 24V AC System.

## DC/AC TO 12VDC CONVERTER

**PC500** | 33774925

- 2.1mm DC plug
- Regulated output, 500mA max
- Convert AC: 14-24VAC or DC: 15-30VDC to 12VDC

## DC/AC TO 12VDC CONVERTER

**PC1A** | 33774930

- Screw Terminals
- Input: AC18~26V; DC18~28V
- Output: DC12V regulated
- 1000mA Max.

## DC POWER SUPPLY – 12V/4AMP

**SM1240** | 33771335

- Regulated output, 4.0A max
- Short-circuit protection
- Switchmode with MEPS class IV efficiency
- Auto reset
- 2.5mm DC plug
- Mains Cable supplied

## DC POWER SUPPLY – 15V/4AMP

**SM1540** | 33774436

- Regulated output, 15V 4.0A max
- Short-circuit protection
- Switchmode with MEPS class IV efficiency
- Auto reset
- 2.1mm DC plug
- Mains Cable supplied

## DC POWER SUPPLY – 12V/5AMP

**SM1250** | 33771340

- Switchmode with MEPS class IV efficiency
- Short-circuit protection
- Auto reset
- 12VDC / 5.0Amp
- 2.1mm Plug
- Mains Cable supplied

## DC POWER SUPPLY – 12V/6.5AMP

**SM1265** | 33771345 12VDC / 6.5AMP

- Switchmode with MEPS class IV efficiency
- Short-circuit protection
- Auto reset
- 12VDC / 6.5Amp
- 2.1mm Plug
- Mains Cable supplied

## 2.1MM TO 8X 2.1MM PLUGS

**PW8208** | 30978208

- 1x 2.1mm DC Power Socket 20cm Lead
- 8x 2.1mm DC Power Plugs 28cm Lead

## 2.1MM TO 4X 2.1MM PLUGS

**PW8204** | 30978204

- 1x 2.1mm DC Power Socket 20cm Lead
- 4x 2.1mm DC Power Plugs 28cm Lead

## 2.5MM SOCKET TO 2.1MM PLUG

**PW8019** | 30978019

- 2.5mm Socket to 2.1mm Plug
- Great for converting plug sizes of power supplies for use with 2.1mm DC extension and splitter leads

## 2.1MM SOCKET LEAD

**PW8190** | 30978190

- 2.1mm Socket preterminated on 130mm lead
- Perfect for cameras with power screw terminals or for connection to power converters

## Why Use DC Power Splitter Cables?

Running a CCTV system from one location is preferable, as a single power supply minimises the level of maintenance. For commercial sites you also don't need a electrician to change multiple power outlets to "24-hour power". Also, a single UPS can be used to supply backup power to whole system.

Installers will often calculate the total power draw of all the cameras. This is often 500mA per camera.

For a 8 camera system, they'll need a power supply that can supply say 4 amps at 12 volts. From there, they'll place a 8 way DC splitter cable and connect it to each cable run.

| | POWER SUPPLY RATING | | | |
|---|---|---|---|---|
| | 1AMP | 2AMP | 4AMP | 6.5AMP |
| 4-WAY | 250mA | 500mA | 1A | 1.6A |
| 8-WAY | 125mA | 250mA | 500mA | 800mA |

## 8 PORT 12VDC PSU WITH BATTERY

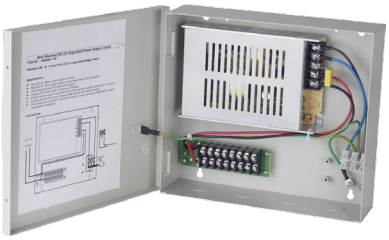
**PW408U** | 33774945

- 8x Individual protected PTC type fused outputs (1.1A)
- Supplies up to 4Amp (0.5Amp per output)
- Backup battery installed: Automatic switch over to stand-by battery when Mains AC fails (3.0AH)
- LED indication of battery status

## Why are PTC resettable fuses so common in Doss products?

For over-current protection and power recovery, PTC fuses are a great solution. If the manufacturer pays a little extra and uses PTCs, the system will require less maintenance and downtime is reduced. They provide protection like a fuse, but are capable of self-resetting, so no maintenance or repair is required when something goes wrong.

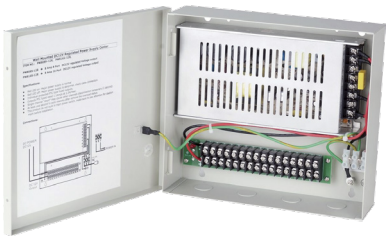
## 8 PORT 12VDC WALL MOUNT PSU



**PW408S-12R** | 33774950

- 8x Individual protected PTC type fused outputs (1.1A)
- Supplies up to 4Amp (0.5Amp per output)

## 16 PORT 12VDC WALL MOUNT PSU



**PW816S-12R** | 33774955

- 16x Individual protected PTC type fused outputs (1.1A)
- Supplies up to 8Amp (0.5Amp per output)

## 16 PORT 12VDC REGULATED PSU

**PR816-12R** | 33774940

- 12VDC/8Amp power supply
- 16x 0.5Amp outputs
- Individual PTC self-resetting protection on each output

## 1-IN 9-OUT POWER DISTRIBUTOR

**PD009** | 33774935

- Individually PTC self-resetting protected outputs: 1.1A
- Individual status LEDs
- Supports up to 30VAC/VDC

## SCREW TERMINATED DC PLUG

**PW8018** | 30978018

- 2.1mm DC plug to screw terminals

## SCREW TERMINATED DC SOCKET

**PW8050** | 30978050

- 2.1mm DC socket to screw terminals

Terminals made from non-recycled materials for longer life

## Recycled or non-recycled plastics?

Plastics exposed to sunlight (UV) over longer periods of time can become brittle and break. This is particular prevalent in Australia, where the UV intensity is much higher.

Although recycled plastics are cheap, they have been particularly poor at coping with these conditions. For that reason, Doss Antennas have always contained non-recycled plastics. Doss cable ties then moved to non-recycled plastics.

Now, you'll notice that even the terminals at the back of the DC plugs are white (previously green), indicating non-recycled plastic and better long-term use when exposed to the elements.

Green terminals made from recycled plastics

White terminals made from non-recycled plastics

## Screw Terminated DC Power Plugs and Sockets

In the past, installers had to solder DC plugs onto cables. In 2008, screw in DC plugs were introduced and have become the standard for the industry.

Now Doss CCTV cameras come standard with a plug like the PW8018. This will screw into either Doss 2x24 Figure-8 cable or the power cable on the CCTVCOM24 (RG59U & Power Combo) Cable. At the power supply end, a PW8050 DC socket is used. This can plug directly into the DC power supply without the need to cut the power supply's lead.

# Balun Factory & Quality Control

## Finding a Factory

Doss knows how important reliability is when it comes to security systems. We know that installations are often complex, and replacing faulty components once installed can often be a nightmare. And we frankly don't like replacing faulty products!

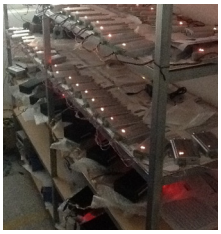
Not only is reliability an important factor when sourcing products, but so are the features of the products. We want to be proud of the products we sell – so we look for products that give our customers real value for money. Value to us means features and reliability that save you time and money. For this reason we search for factories with the same ethics and take true pride in their products.

That's why we source our products from only the best factories we can find. Doss only chooses factories that have a strong focus on producing a high-quality product our customers can rely on.

Our new range of CCTV Video Baluns have been specially sourced for their quality and reliability. The factory goes through a stringent quality control process to ensure this:

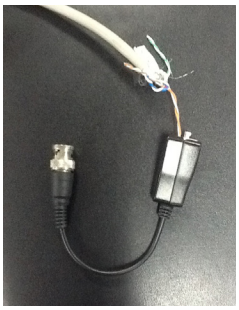
1. The balun balance coils are actually manufactured in house to ensure the components meet the engineers' specifications completely.
2. Only the best materials are used. For example, only **100% copper** is used in the manufacture of the balun coils. Not only the quality of the material is important, but more windings are added to the balun coils than typical balun coils, to reduce variation in signal responses.
3. **All** passive components manufactured in house are tested thoroughly to ensure they are not defective and are within the very tight specifications.
4. Every active device produced is worn-in for at least 72 hours before passing testing, resulting in a product you can be sure works out of the box.

In-house manufacture of balun coils means all parts meet high standards. 100% copper is used to ensure minimal imperfections and impurities, reducing variation in signal quality.



All products produced in-house are tested thoroughly. Every passive component is tested to ensure specifications are met. All active products are aged for a minimum of 3-days.

## Balun Design Decisions



Strong durable push-pin terminals can hold up to 10kg of weight – the copper conductor is not sandwiched by flat metal terminals, rather the terminal grips onto the conductor tighter when it's pulled!

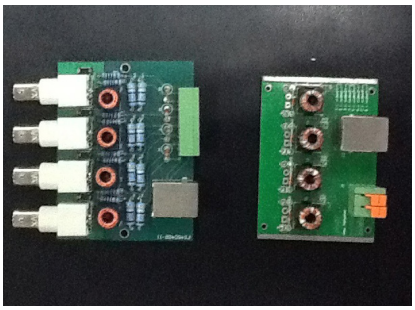
An internal shot of one of our passive video baluns: it may be small but there's a lot in even our basic model. It features a 100% copper balance coil that has finer wire, but more winds for a more uniform winding (helps reduce eddy-currents and therefore improves signal quality).

Our power hubs feature exactly the same components and features as the individual baluns – only possible when a factory produces all their products in-house.

This ensures compatibility between all devices and that they all work together with-in specification.

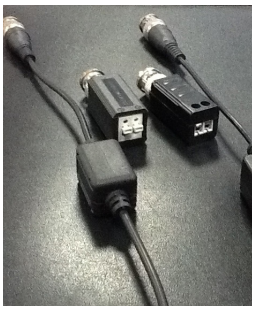
Our baluns (left x2) may look like other baluns (right) but there are some massive differences that you can't see.

The conductor pin in our BNC plugs and sockets are 100% copper which improves impedance matching, and reduces signal losses. Our baluns all have built-in surge protection and the balance coils are all specially engineered and tested in-house!

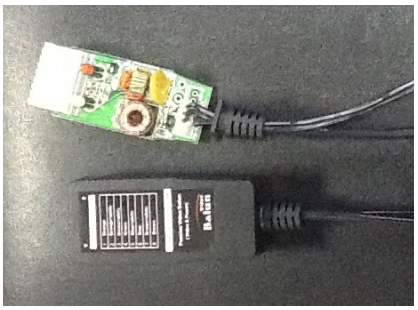


Our Doss passive balun hub (left) vs another brand (right). Components used are over-rated to ensure down-time and maintenance costs are kept low.

You can also see there is simply more copper in our balance coils, and the windings are evenly distributed to ensure a nice, clean signal.



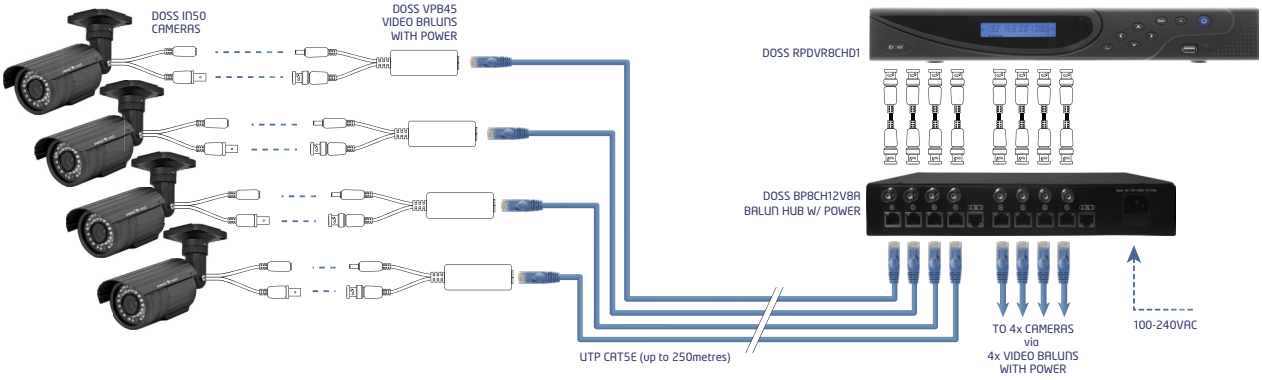
There are several different forms that our baluns come in. Sealed for weather-proof installation, small and compact for direct connection to camera bodies, and several different terminations: screw, push-pin, solder, and also RJ45 socket.



Big features in a small package: PTC self-resettable over-current protection, surge protection, quality balance coils and easy to install RJ45 connection.

The new range of screw terminals and push-pin terminals will be made from harsh-environment tolerant non-recycled plastics.

# UTP Passive Video Baluns With Power




## VIDEO + POWER BALUN [PUSH-PIN]

**VPBPP** | 43151205

- 8-Way Push-pin terminals
- Relocate camera power pack
- Transmit Video+Power up to 250m over CAT5e UTP

## VIDEO + POWER BALUN [RJ45]

**VPB45** | 43151200

- RJ45 Jack for quick connection CAT5e UTP cable
- Features overload and lightning protection

## VIDEO + POWER BALUN WITH DC TO DC CONVERTER

**VPB45PCD** | 43151210

- High quality parts ensure excellent video signal transmission
- Converts 24-28V DC to regulated 12V DC at camera balun

## 4CH VIDEO BALUN POWER HUB

**BP4CH12V5A** | 43151135

- Transmit power up to 250m over CAT5e UTP cable
- Powers up to 4 cameras with built-in 12VDC/5A supply

## 8CH VIDEO BALUN POWER HUB

**BP8CH12V8A** | 43151140

- Powers up to 8 cameras with built-in 12VDC/8Amp supply
- 8x Video outputs
- Works with Doss Video+Power baluns

## 16CH VIDEO BALUN POWER HUB

**BP16CH12V16A** | 43151145

With the same features and abilities as the DOSS Video+Power baluns, and the convenience of a single box with built-in power supply, the BP16CH12V16A is able to supply 16x CCTV cameras with 12VDC, up to 1A each. Video received from the transmitting baluns is output via 16x Female BNC connections straight into your DVR or other recording device.

The superior interference rejection and low emissions of the BP16CH12V16A allow signals to coexist in the same wire bundle as telephone, datacom, or low-voltage power circuits. This allows the use of a shared or existing cable infrastructure.

- Powers up to 16 cameras with built-in 12VDC/12Amp supply
- Same transmission quality features as Video+Power baluns
- Built-in TVS (Transient Voltage Suppressors) for surge protection

# UTP Passive Video Baluns with Power+Data

## VIDEO + POWER + DATA [PUSH PIN]

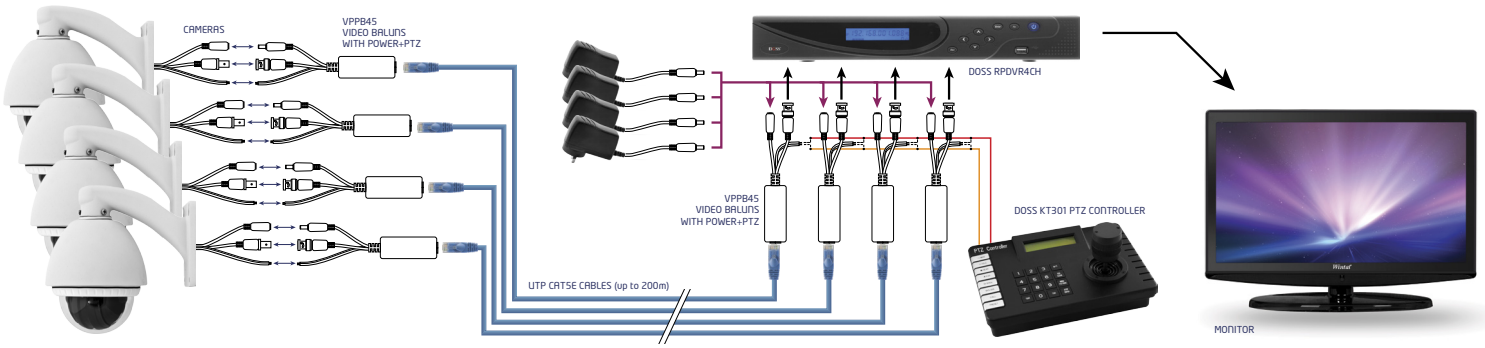
**VPPBPP** | 43151225

- 8-Way Push-pin terminals
- Supports RS485 transmission
- Transmit Video+Power+PTZ up to 200m over CAT5e

## VIDEO + POWER + DATA [RJ45]

**VPPB45** | 43151220

- RJ45 Jack for quick connection CAT5e UTP cable
- Features overload and lightning protection



# CCTV Coaxial Cables and Accessories

## RG59U SOLID CORE COAX CABLE

**RG59U-1MT** | 05052023

- 1/Ø0.65mm Copper Clad Steel core
- Braided screen: 16/7/0.14 OFC(88%)
- Wave impedance: 72±3 ohm(@200MHz)
- Capacitance: 73±5pF/m

ATTENUATION

| | |
|---|---|
| 1~450MHz | 25dB/100m |
| 450~862MHz | 45dB/100m |
| 862~2150MHz | 60dB/100m |

## TWIN POWER CABLE 2X24/0.2

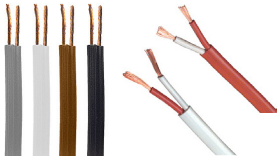


FIGURE-8 2X24/0.2 TWIN CORE

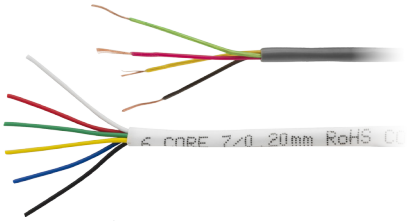
| | | |
|---|---|---|
| **2X24-.2PB-1MT** | 05093003 | BLACK |
| **2X24-.2PBR-1MT** | 05093004 | BROWN |
| **2X24-.2PW-1MT** | 05093005 | WHITE |
| **2X24-.2PG-1MT** | 05093006 | GREY |

DOUBLE INSULATED FLAT 2X24/0.2 TWIN CORE

| | | |
|---|---|---|
| **2X24-.2DSW-1MT** | 05093020 | WHITE |
| **2X24-.2DSR-1MT** | 05093026 | RED |

- 2 core x 24 strand (0.2mm)
- PVC Insulation
- Sold per metre
- Available as 100 metre roll

## 4-CORE / 6-CORE CABLE




| | | |
|---|---|---|
| **4X7-.2SC-1MT** | 05062008 | 4-CORE |
| **6X7-.2SC-1MT** | 05062024 | 6-CORE |

- 4 core (4.8mmØ)
- 6 core (5.5mmØ)
- Great for alarm signal lines

## RG59U & POWER COMBO CABLE

**CCTVCOM24-1MT** | 05062038

- Bonded CCTV RG59U and Double Insulated 2x Power
- Easy to install power and video at same time!

## NAIL-DOWN CABLE CLIPS

| | | |
|---|---|---|
| **6RCCB** | 05492050 | 6MM BLACK |
| **6RCCW** | 05492051 | 6MM WHITE |
| **15RCCB** | 05492060 | 15MM BLACK |
| **15RCCW** | 05492061 | 15MM WHITE |

- 6mm round cable clip to suit RG59U
- Pack of 100 pcs
- 15mm square cable clip to suit bonded RG59U+Power or Twin RG59U cables

## COMMON WIRING COLOURS

These are common colour codes for various security equipment, however check with your hardware's installation documentation before connecting to an existing system!

| 4-CORE | 4-CORE (ALT) | 6-CORE |
|---|---|---|
| +PWR | +PWR | +PWR |
| ALARM SIG | | ALARM SIG |
| ALARM GND | | ALARM GND |
| | ALARM SIG | TAMPER SIG |
| | COM (TAMPER) | TAMPER GND |
| PWR GND | PWR GND | PWR GND |

# BNC Accessories

| | | | |
|---|---|---|---|
| 1 | **PA6113** | 30256113 | BNC PLUG TO RCA SOCKET |
| 2 | **PA5720** | 30255720 | RCA SOCKET TO BNC SOCKET |
| 3 | **PA5701** | 30255701 | RCA PLUG TO BNC SOCKET |
| 4 | **PA6001** | 30256001 | BNC PLUG TO BNC PLUG |
| 5 | **PA5990** | 30255990 | BNC PLUG TO 'F' SOCKET |
| 6 | **PG1038** | 30521038 | BNC CRIMP PLUG TO SUIT RG59U |
| 7 | **PA6117** | 30256117 | BNC PLUG TO RIGHT ANGLE BNC SOCKET |
| 8 | **PG1092** | 30521092 | BNC COMPRESSION PLUG TO SUIT RG59 (W/ 6 COLOUR RINGS) |
| 9 | **PG1001** | 30521001 | RIGHT ANGLE BNC PLUG SCREW TERMINATING |

## CAMERA EXTENSION LEAD

| | | |
|---|---|---|
| **CEL5M** | 43158110 | 5M |
| **CEL10M** | 43158115 | 10M |
| **CEL20M** | 43158125 | 20M |
| **CEL30M** | 43158130 | 30M |

- Weather Resistant
- High Quality Connectors
- Package include Gender Changers

## GROUND LOOP ISOLATOR

**GLI02** | 43151075

- Reduce picture rolling, tearing and noise
- Weather-proof design
- No power required
- Solve ground loop issues without tracing inaccessible cables

Ground loops occur when two points, assumed to be the same voltage potential ie. ground, are in fact different.

It generally happens when the camera is not grounded at the monitoring/recording equipment, but at the point it is mounted (or both).

This can result in "hum bars", picture tearing, cross-talk (or ghosting) and image rolling. Fitting a Ground Loop Isolator or avoiding incorrect grounding will fix most issues.

# UTP CCTV Passive Video Baluns

## MINI PASSIVE BNC VIDEO BALUN

**BVB4200WP** | 43151090

- Waterproof mini-balun
- No power required
- Bare leads to allow soldering and waterproofing

## PASSIVE VIDEO BALUN

**BVB4102S** | 43151094 SCREW TERMINALS
**BVB4100P** | 43151096 PUSH-PIN TERMINALS

- Transmit video up to 400m over CAT5e UTP cable
- Mounts directly to camera
- No bulky expensive coax cables

## PASSIVE VIDEO BALUN PUSH-PIN

**BVB4201PL** | 43151098

- Strong push-pin terminals allow ultra-quick installation
- Send video alongside other cables without interference

## RCA ANALOGUE AUDIO BALUN

**AAB1001** | 43151100

- Send analogue audio over Unshielded Twisted Pair (UTP) up to 1500m
- Screw terminal connection
- Compact size

## RCA COMPOSITE VIDEO BALUN

**CVB1001** | 43151105

- Send Composite (1 pair) or Component (3 pairs) video over Unshielded Twisted Pair (UTP) up to 300m
- Gold plated RCA Plug

## COAXIAL VIDEO SURGE PROTECTOR

**VSP01** | 43151078

- Lower insertion loss and quicker response time
- Large through-flow capacity, long life
- Easy installation and convenient maintenance

## ECO CAT5E CABLE [UNAPPROVED]

**UNA4PRX7BLK-1MT**
05062705

- Copper-clad Aluminium core for economical cost
- Higher conductivity (lower voltage losses)
- Designed specifically for CCTV applications

## CAT5E SOLID CABLE [BLACK]

**4PRX7BLK-1MT**
05062804

- For high speed data applications
- 24 AWG Solid copper conductor cores
- Supplied by the metre or roll

## High Frequency Interference

This occurs when cables pick up high frequency EMI – this can even be RF. High frequency sources can also be light switches/dimmers, fluorescent lighting, TVs or CRT monitors, or any other device that switches power quickly.

It can cause symptoms that range from rolling coloured bands, to wavy, dynamic patterns over the image.

Using twisted pair or balanced cabling is usually the best way to combat such interference.

**Recommended Product:**
Doss Passive UTP Video Baluns

## Impedance mismatching / Long cable run

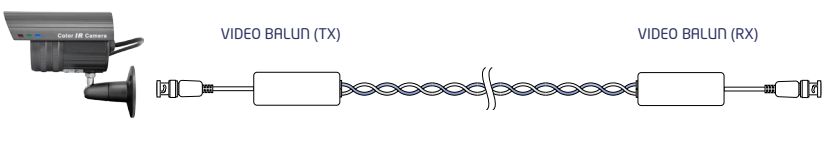
Impedance mismatching generally occurs in long runs of cable but is also a result of incorrectly matched plugs and cables – eg. 50Ω BNC connector on 75Ω Coax cable.

This can cause oscillations and reflections in the cable at random frequencies and this, in turn, results in "hum bars" or ghosting. Picture rolling or instability can also occur if these oscillations "corrupt" the video sync signals.

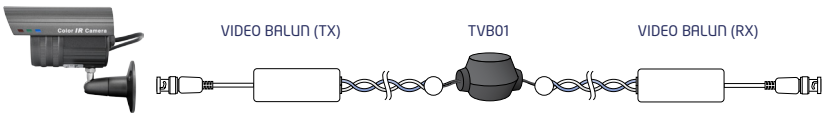
**Recommended Product:**
TVB001 Video Transformer Filter

## Tips for a great picture

- Ground signal cables/equipment only at one point – ie the recording system / monitoring end. This also means not grounding the camera bodies or brackets.
- Keep runs of cable as short as possible and away from interference sources such as high voltage lines.
- Use quality connectors and cables with correct specifications.
- Use twisted pair baluns and cabling – this will massively resist electromagnetic interference.



**1** A basic Unshielded Twisted Pair cable can be used with passive video baluns to reduce High Frequency Interference.



**2** The TVB001 helps reduce interference caused by long cable runs and mismatched impedances and is easy to install.

# DVR Range

DVRs or Digital Video Recorders are an essential part of any home or small business CCTV security system. We all spend so much time out of home, at work and on holidays, we can't be stuck watching CCTV monitors for suspicious behaviour. DVRs record continuously so that in the event something goes missing or there is a break-in, the footage is readily available for review.

## Why a Doss DVR?

Featuring high quality, high resolution 700TVL (960H) recording, the Doss RPDVR Range allows you to record video that is clear – allowing you to distinguish important features in your security footage.

The Doss RPDVR Range of DVRs doesn't only blindly record video input, but thanks to their Embedded Linux system, they are capable of much more.

Being network attached, you can access, view and control your DVR from any of your home or business computers and a huge range of mobile devices!

## Why a Network DVR?

View your cameras via your home PC or laptop using the Windows PC Client Software, or any computer with Internet Explorer (where ActiveX is available).

Being connected to your home or business network provides a link to the internet through which you can also access your DVR from anywhere in the world – even on your mobile device including iPhone, iPad, Android phones and tablets and even Blackberrys.

Not only does the Doss DVR Range support remote access, but when connected to the internet you can be alerted via email on detection of motion on any of the camera inputs!

The entire Doss DVR range has alarm inputs and outputs, allowing you to connect your DVR to your existing home or business alarm system. This provides a portal for your alarm system to alert you in real-time to events occurring at your home or business. Alternatively you can connect individual PIR and door sensors that, when triggered, can cause the DVR to email you a photo of the area under monitor for your instant review.

Avoid false alarms, and triggered alarms that go ignored for hours; get real-time alerts so you can decide whether you should call the police or not!

## 960H HIGH RESOLUTION 4/8/16 CHANNEL NETWORK DVRS

960H RECORDING
H.264 COMPRESSION
UP TO 8TB STORAGE
REMOTE ACCESS
P2P ZERO-CONFIG
1080P HDMI OUTPUT
MOTION DETECTION

**THE NEW DOSS RANGE OF DVRS NOW FEATURE 960H RESOLUTION CAPTURE AS WELL AS NEW P2P, ZERO-CONFIG NETWORKING TECHNOLOGY, ALLOWING ACCESS FROM VIRTUALLY ANYWHERE**

Latest P2P technology allows viewing from anywhere in the world without configuring complicated Port Forwarding or expensive Dynamic DNS services! Simple QR Code allows instant access from mobile phones using the free app available for iOS and Android.
Get the maximum quality image out of your 700 TVL resolution cameras—the latest 960H DVR recording technology allows the clearest possible images for analogue video!

- All models also available non-branded

### Features

- 960H real time recording
- H.264 Compression (up to 8000kbps)
- 960H / D1 / CIF and QCIF resolutions
- Bi-directional audio talkback
- Embedded Linux operating system
- Supports Live video playback while recording
- 2x Internal SATA connections for HDD
- Up to 8TB internal storage
- Network functionality: P2P, DDNS, Email, UPnP
- Remote viewing via Web browser, PC Client, and Mobile Apps
- BNC/VGA/HDMI simultaneous output
- up to 1080P output via HDMI for high resolution grid view
- External alarms for interfacing with existing security systems

## Doss 960H DVR Range Comparison

| | 4DVR960<br>43170845 | 8DVR960<br>43170850 | 16DVR960<br>43170855 |
|---|---|---|---|
| Channels | 4ch | 8ch | 16ch |
| Video Input Format | PAL / NTSC | | |
| Video compression | H.264 (High Profile @ Level 4.2) / 64-8000kbps | | |
| Recording Resolution | 960H, D1, CIF, QCIF | | |
| Video Output | CVBS / VGA / HDMI (simultaneous output) | | |
| Image Display | 1 / 4 | 1 / 4 / 9 | 1 / 4 / 9 / 16 |
| Motion Detection | 22x18 zones + sensitivity adjust | | |
| Audio In / Out | 4 / 1 (BNC) | | |
| Record Trigger | Manual / Alarm / Motion / Schedule | | |
| Realtime Playback | 4CH 960H | | 8CH 960H/16CHD1 |
| HDD Capacity | 2x SATA / Max. 4TB (per HDD) | | |
| Recording storage | Local HDD, Network | | |
| Alarm In / Out | 4 / 1 | 4 / 2 | 16 / 3 |
| RS-485 | Yes (1x) | | |
| USB Port | 2x USB2.0 | | |
| Power Supply | DC12V / 3A | | DC12V / 4A |
| Power Consumption | 15W (Without HDD) | | |
| Dimensions (LxWxH) | 360 x 250 x 44mm | | |

# Remote Access Setup

**Our new range of 960H DVRs are designed to be accessed remotely without the need for complicated network setups. Our integrated Peer-to-Peer technology makes remote access a breeze, but if you have an older version or would much rather have someone else set up remote access for you, we offer a Remote Access Setup service for a nominal fee.**

Our Doss DVRs have a wealth of remote access options ranging from your mobile phone to any PC with a browser. But getting through firewalls and setting up port forwarding on your router can quickly become quite the hassle. To lift this burden, we are providing the cheapest, most economical remote access service available in Australia.

This service aims to provide a working setup that will enable remote access to your DVR via:

- Internet Explorer (ActiveX)
- the included PC client and,
- your smart phone (iPhone/ iPad, Android. other platforms depend on software availability.)

This generally involves setting up your router to port forward, adjusting firewall settings on your PC, setting up a Dynamic DNS service to accommodate for changing IP addresses & more.

To learn more: scan the code or visit radioparts.com.au and search for 'RMACCESS'

## IP CCTV—What is it and why?

IP (or Internet Protocol) Cameras and CCTV operate, as the name suggests, over IP networks. You do not require separate infrastructure such as RG59/6 cabling as it uses your existing networking hardware and cabling to distribute video to clients and NVRs.

Due to the nature of the protocol, communication is two-way, allowing configuration, recording & viewing, and audio talk-back, all from a multitude of different devices, such as your PC, Mobile or NVR. It also allows encryption, stopping eavesdroppers splicing into your cables to view your cameras.

IP cameras offer some degree of self processing, detecting motion and improving images using more intensive WDR algorithms than typical analogue cameras. They can also record to a storage card, or memory built into the camera itself, so if your infrastructure goes down, whether through scheduled maintenance or malicious intent, your camera will have a backup copy of what it saw.

Even though IP cameras can operate more independently of your recording and backup system, NVRs (Network Video Recorders) provide the familiar role of a DVR, bringing together all your cameras as sources, allowing direct recording and back up to HDD, as well as synchronised playback of recorded files.

With ONVIF compliance for DOSS' NVR and Integrated and Dome IP Cameras, you can be confident our devices will work with your other ONVIF compatible IP CCTV devices.

## NETWORK VIDEO RECORDERS

P2P ZERO-CONFIG

1080P HDMI OUTPUT

ONVIF COMPLIANT

**NVR4CH** | 43172005 | 4 CHANNEL
**NVR8CH** | 43172015 | 8 CHANNEL

Configure, view and record multiple cameras at once, the new DOSS NVRs are able to provide you with a familiar DVR experience over IP.

- H.264 Compression ▪ Linux OS ▪ 2x SATA connections
- Powers cameras via PoE ▪ Conforms to ONVIF standards
- Supports simultaneous remote monitor, playback, and record
- Simultaneous VGA & HDMI Output
- Simple pairing to instantly connect with IP Cameras
- P2P Setup – No port forwarding required!

## Domestic IP Pan/Tilt Cameras

### MJPEG WIRELESS IP CAMERA

**PT10QRECO** | 43160500

- MJPEG compression
- Simple connection via QR code
- Remote pan & tilt
- Built-in microphone
- Dual networking: both Ethernet & Wi-Fi connections possible

### 720P WIRELESS IP CAMERA

**PT10QRW** | 43160535

- 720p HD Video recording
- Simple connection via QR code
- Remote pan & tilt
- Motion detection
- Two-way audio
- Dual networking: both Ethernet & Wi-Fi connections possible

### IP OVER COAX EXTENDER

**IPOC200** | 43151235

- Transmit IP camera signal over Coax up to 200m!
- Passive device, no power required ▪ Built-in Surge Protection

## 1080P FULL HD IP CAMERAS [BULLET]

ONVIF COMPLIANT

| | IPIN30FHD | IPIN50FHD |
|---|---|---|
| Colours | ● 43160115 ○ 43160117 | ● 43160125 ○ 43160127 |
| Resolution | 1080p | |
| Compression | h.264 | |
| Sensor | 1/2.9" SONY 2.43 Mega-pixel CMOS sensor | |
| IR LEDs | 36xØ5 | 2xIR III |
| IR Distance | 20-30m | 40-50m |
| Lens | 3.6mm M12 | 2.8-12mm 3M ICR |
| Alerts | Snap/Email/FTP/NTP/UPNP | |
| Other featues | WDR, 3DNR, dual stream, privacy zone | |
| BNC analog video out | No | Yes |
| 3D bracket adjustable | Yes | |
| Protection | IP65 weatherproof casing | |
| Power | DC 12V with POE | |

## 1080P FULL HD IP CAMERAS [DOME]

ONVIF COMPLIANT

| | IPDM15FHD 43160015 | IPDM30FHD 43160025 | IPWD10FHD 43160002 |
|---|---|---|---|
| | | | Wide Angle Dome |
| Resolution | 1080p | | |
| Compression | h.264 | | |
| Sensor | 1/2.9" SONY 2.43 Mega-pixel CMOS sensor | | |
| IR LEDs | 18xØ5 | 28xØ5 | – |
| IR Distance | 10-15m | 20-30m | – |
| Lens | 12mm 3M ICR | | 3.6mm |
| Alerts | Snap/Email/FTP/NTP/UPNP | | |
| Vandal Proof | Yes | | No |
| Other featues | WDR, 3DNR, dual stream, privacy zone | | |
| BNC analog video out | Yes | | No |
| 3D bracket adjustable | Yes | | No |
| Protection | IP65 weatherproof casing | | |
| Power | DC 12V with POE | | |

# Non-Permanent Security

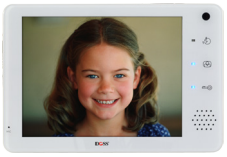
## Video Intercom

### 7" HANDSFREE VIDEO INTERCOM

**DHF72PC** | 21816223

- Video and audio two way intercom system
- Simple connection and easy DIY installation
- Hands-free operation ▪ Door lock control
- Mounting hardware supplied

### SPARE MONITOR FOR DHF72PC



**DHF72SM** | 21816227

- Expand your video intercom system to view your front door from a second location—perhaps upstairs or your granny-flat!

### SPARE SURFACE MOUNT CAMERA

**DSPC72** | 21816217

- CCD Surface mount camera
- 6 IR LEDs for night viewing
- Vertical camera adjustment
- Weatherproof plastic casing

### SPARE FLUSH MOUNT CAMERA

**DSMC52** | 21816220

- Outdoor Metal Vandal Proof Camera and Mount ▪ CCD Camera
- Multi-mount options ▪ Night vision

## Vehicle Cameras

### 1080P FULL HD CAR DVR

**CD2FHD** | 43170560

- 2.7" Colour 16:9 LCD ▪ 1/3" 3MP CMOS Sensor
- WDR improves image details in bright and dark lighting
- G-sensor detects impacts or heavy braking
- Motion detection mode ▪ MicroSD card slot

### 540TVL MINI VEHICLE CAMERA

**IN10REV** | 43158800

The perfect package for use as a vehicle reversing camera but is also small enough and has a high resolution sensor making it suitable for discrete surveillance.

- 1/3" SONY Super HAD II CCD
- Resolution: 540TVL ▪ IR distance: 5~10m

### 600TVL PINHOLE CAMERA

**PHCAM** | 43150682

A great discreet camera for security where obvious surveillance equipment is undesirable. At just over a few centimetres wide, this camera can be installed in just about any location

- 1/3" SONY Super HADII CCD ▪ 600TVL

## Home Alarm

### SIMPLE WIRELESS CABLE-FREE HOME SECURITY KIT

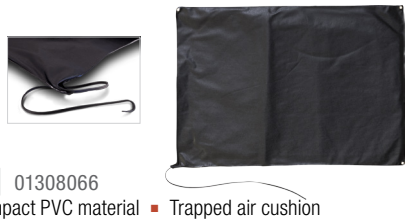
**WDA-KIT** | 01301023

- Wireless security alarm system with built-in phone
- Simple DIY installation; no wiring needed–great for renters!
- Up to 10 zones with up to 100 sensors per zone!
- Built-in siren

**Package includes:**

- 2x Remote Controls ▪ 1x Medical Remote Control
- 2x PIR Sensors ▪ 1x Door Gap Reed Switch + Battery
- 1x Power Supply ▪ 1x User Manual ▪ 1x Main unit (phone)
- Spare remote also available: WDA-RC I 01301026

### SECURITY PRESSURE MAT / PAD



**PM100** | 01308066

- High impact PVC material ▪ Trapped air cushion
- 800 x 540mm ▪ A low cost, covert detection device

### DUAL BEAM PHOTO SENSOR

**DBPC946** | 01301659

- Horizontal/Vertical adjustments
- Auto Gain Control
- Range: 90~180m (indoor) - 30~60m (outdoor)

**CALL** 1800 337 366
FOR DOSS SUPPORT

OR

**VISIT** DOSS.COM.AU
FOR PRODUCT MANUALS, INFOSHEETS & DEALER LIST

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